

What is claimed is:

1 1. A washing machine comprising:
2 leakage containment means for accumulating leaking water; and
3 leakage detection means for detecting an accumulation of leaking water in said
4 leakage containment means.

1 2. The washing machine as claimed in claim 1, said leaking containment means
2 comprising a cabinet having a plurality of sides and a bottom.

1 3. The washing machine as claimed in claim 2, wherein said cabinet is formed
2 by a plurality of connected side panels forming a bottom opening and a bottom panel having a
3 perimeter, connected to a bottom edge of each connected side panel, for closing the bottom
4 opening formed by the side panels.

1 4. The washing machine as claimed in claim 3, wherein each of the plurality
2 connected side panels comprises a bottom flange formed at the bottom edge of each side
3 panel to be bent inward.

1 5. The washing machine as claimed in claim 4, wherein the perimeter of the
2 bottom panel rests atop the bottom flanges of the side panels and is secured to the side panels.

1 6. The washing machine as claimed in claim 5, further comprising sealing
2 means to seal the bottom panel to the side panels.

1 7. The washing machine as claimed in claim 6, said sealing means comprising:
2 compression means passing through the perimeter of the bottom panel and the bottom
3 flanges; and
4 a packing member inserted between the bottom flanges and the bottom panel and
5 compressed by said compression means.

1 8. The washing machine as claimed in claim 2, said leakage detection means
2 comprising a switch activated by a predetermined level of accumulation of leaking water in
3 said leakage containment means.

1 9. The washing machine as claimed in claim 8, said leakage detection means
2 further comprising:
3 a switch support for supporting said switch at an upper end, connected at a lower end
4 to an inner surface of the bottom of the cabinet, said support having an interior space of a
5 predetermined height and having at least one perforation allowing water flow from said
6 leakage containment means to the interior space of said switch support; and
7 a float member having a predetermined buoyancy, disposed in the interior space of
8 said switch support such that said float member is brought into contact with said switch by
9 floating, to thereby activate said switch, if the accumulation of leaking water in said leakage
10 containment means reaches the predetermined level.

1 10. The washing machine as claimed in claim 9, wherein said switch is a tactile
2 switch having a sensitivity allowing operation by the buoyancy of said float member.

1 11. The washing machine as claimed in claim 9, said switch support comprising
2 a switch mount for securely positioning said switch above said float member.

1 12. The washing machine as claimed in claim 1, said leakage detection means
2 outputting a leakage detection signal if the accumulation of leaking water in said leakage
3 containment means reaches a predetermined level.

1 13. The washing machine as claimed in claim 12, further comprising:
2 a main inlet valve for supplying water to a tub;
3 a microcomputer, receiving the leakage detection signal from said leakage detection
4 means, for outputting at least one control signal to shut off said main inlet valve if the
5 accumulation of leaking water in said leakage containment means reaches the predetermined
6 level.

1 14. The washing machine as claimed in claim 13, further comprising warning
2 means, receiving the at least one control signal from said microcomputer, for informing the
3 user of the status of the washing machine including an indication of the accumulation of
4 leaking water in said leakage containment means reaching the predetermined level.

1 15. A washing machine control method comprising steps of:
2 supplying water to a tub;
3 determining whether a water leakage condition exists; and
4 shutting off the supply of water to the tub, if it is determined that a water leakage

5 condition exists.

1 16. The method of claim 15, wherein the supply of water is controlled by a main
2 inlet valve.

1 17. The method of claim 15, further comprising a step of generating a sensed
2 water leakage signal, if it is determined that a water leakage condition exists.

1 18. The method of claim 15, further comprising a step of generating a warning
2 signal, if it is determined that a water leakage condition exists.